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**Datasheet for the decision
of 25 July 2014**

Case Number: T 2035/11 - 3.5.07

Application Number: 97942552.7

Publication Number: 1018081

IPC: G06F17/00, G08G1/137, G01C21/20

Language of the proceedings: EN

Title of invention:
Navigation system with user definable cost values

Applicant:
Beacon Navigation GmbH

Headword:
Navigation system/BEACON NAVIGATION

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - main request (no)
Remittal to the department of first instance - (yes)

Decisions cited:
T 0154/04, T 1784/06, T 1670/07
German Federal Supreme Court: BGH, 18 December 2012,
X ZR 3/12, GRUR 2013, 275 - Routenplanung

Catchword:
See points 5 to 5.3 of the reasons

Case Number: **T 2035/11 - 3.5.07**

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 25 July 2014

Appellant: (Applicant)	Beacon Navigation GmbH c/o Treuhand AG Innere Güterstrasse 4 6304 Zug (CH)
Representative:	Klunker . Schmitt-Nilson . Hirsch Patentanwälte Destouchesstraße 68 80796 München (DE)
Decision under appeal:	Decision of the Examining Division of the European Patent Office posted on 17 March 2011 refusing European patent application No. 97942552.7 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman	R. Moufang
Members:	R. de Man
	M. Rognoni

Summary of Facts and Submissions

I.   The applicant (appellant), which at the time was Beacon
        Navigation Inc., lodged an appeal against the decision
        of the Examining Division refusing European patent
        application No. 97942552.7.

II.   The decision cited the following document:

        D1: US 5 184 303 A, 2 February 1993.

        The Examining Division decided that the subject-matter
        of claim 1 of the sole request before it lacked an
        inventive step over "a system comprising a storing
        means adapted to store data and a [sic] input means
        adapted to input data". Such a system was so well-known
        before the priority date of the present application as
        not to require further evidence. In addition, the
        subject-matter of independent claims 11 and 20 was
        found to be excluded from patentability under
        Article 52(2) and (3) EPC. Document D1 was mentioned as
        an example of a commonplace navigation system that
        could be used for the implementation of the non-
        technical scheme underlying the invention as defined by
        claim 1.

III.   With the statement of grounds of appeal, the appellant
        filed a main request and auxiliary requests 1 to 3. The
        appellant conditionally requested oral proceedings.

IV.   With effect from 19 January 2012 the application was
        transferred to Beacon Navigation GmbH, which thereby
        obtained the status of appellant.

V.   In a communication accompanying a summons to oral
        proceedings, the Board *inter alia* raised objections on

clarity, support and added subject-matter and expressed
as its preliminary opinion that the subject-matter of
claim 1 of all requests lacked an inventive step within
the meaning of Articles 52(1) and 56 EPC over the
navigation system discussed in the background section
of the present application.

VI.   With a letter dated 25 June 2014, the appellant
        replaced the then pending requests with a main request
        and auxiliary requests 1 to 4.

VII.   The oral proceedings took place on 25 July 2014. During
        the oral proceedings, the Board expressed a negative
        opinion in respect of inventive step for the subject-
        matter of claim 1 of the main request and of auxiliary
        requests 1 to 4. The appellant then replaced auxiliary
        request 1 with a new auxiliary request 1. At the end of
        the oral proceedings, the chairman announced the
        decision of the Board.

VIII.   The appellant requested that the decision under appeal
        be set aside and that a patent be granted on the basis
        of the claims of the main request filed with the letter
        dated 25 June 2014 or, in the alternative, on the basis
        of the claims of auxiliary request 1 filed during the
        oral proceedings or of one of auxiliary requests 2 to 4
        filed with the letter dated 25 June 2014.

IX.   Claim 1 of the main request reads as follows:

        "A navigation system comprising:
        a database of road segments to be travelled by a user,
        said database including a cost associated with each
        said road segment, wherein an estimated time of travel
        and an estimated length of travelare [sic] associated
        as costs with each said road segment;

a system for selecting a beginning point relative to
said database of roads;
a user input device for selecting a desired destination
relative to said database of roads;
a system which is configured to allow the user to
adjust said cost of at least one selected said road
segment proportionally to its estimated time of travel
or estimated length of travel utilizing said user-input
device; and
a system for determining a route from said database of
roads between said beginning point and said desired
destination based upon said adjusted cost of said road
segments, wherein the navigation system evaluates the
cost of the road segments to be traveled in several
potential routes and recommends the potential route
having the lowest total cost."

X.   Claim 1 of (new) auxiliary request 1 reads as follows:

"A navigation system comprising:
a database of road segments to be travelled by a user,
said database including a cost associated with each
said road segment, wherein an estimated time of travel,
an estimated length of travel and a congestion level
are associated as costs with each said road segment;
a system for selecting a beginning point relative to
said database of roads;
a user input device for selecting a desired destination
relative to said database of roads;
a data receiving device which is configured to receive
congestion information regarding congested road
segments and automatically update congestion levels
associated with appropriate road segments;
a system which is configured to allow the user to
adjust said congestion level of at least one selected
said road segment utilizing said user-input device; and

a system for determining a route from said database of
roads between said beginning point and said desired
destination based upon said adjusted congestion level
of said road segments, and which multiplies the cost of
each road segment by the congestion level for that road
segment,
wherein the navigation system evaluates the cost of the
road segments to be traveled in several potential
routes and recommends the potential route having the
lowest total cost."

Claim 10 of auxiliary request 1 reads as follows:

"A method for determining a route implemented in a
navigation system, the method including the steps of:
a) providing a database of road segments to be
travelled by a user, said database including a cost
associated with each said road segment, and wherein an
estimated time of travel, an estimated length of travel
and a congestion level are associated as costs with
each said road segment;
b) selecting a beginning point relative to the database
of roads;
c) selecting a destination relative to said database of
roads;
d) receiving congestion information regarding congested
road segments by a data receiving device and
automatically updating congestion levels associated
with appropriate road segments,
e) the user adjusting the congestion level associated
with a selected road segment in said database of roads;
and
f) the navigation system determining a route from said
database of roads from said beginning point to said
destination based upon said adjusted congestion level,
and multiplying the cost of each road segment by the

congestion level for that road segment, wherein the navigation system evaluates the cost of the road segments to be traveled in several potential routes and recommends the potential route having the lowest total cost."

Claims 2 to 9 and 11 to 19 of auxiliary request 1 are dependent claims.

XI. In view of the outcome of the appeal, the text of the claims of auxiliary requests 2 to 4 need not be given.

Reasons for the Decision

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

2. Since the main request, auxiliary request 1 and auxiliary requests 2 to 4 represent serious attempts to overcome objections raised in the contested decision and in the Board's communication accompanying the summons to oral proceedings, the Board exercises its discretion to admit them into the proceedings (Article 13(1) and (3) RPBA).

3. *The invention*

3.1 The application mainly relates to navigation systems that can be tailored to a user's particular wishes. The focus of the application is on the route-planning functionality of a navigation system, and the application in fact discloses that the navigation system need not be installed in a vehicle, but can be located in a personal computer (see page 1, lines 11 and 12, and page 4, line 29, to page 5, line 4).

3.2   The navigation system comprises a database of road
        segments, a system for selecting a beginning point, a
        user input device for selecting a desired destination,
        and a system for determining a route between said
        beginning point and said desired destination.

3.3   Examples of user input devices for selecting the
        desired destination include a mouse and a keyboard
        (page 4, lines 19 and 20). The system for selecting a
        beginning point may be a GPS system, but may also be a
        user input device (page 2, lines 27 to 29).

3.4   The database of road segments includes, for each road
        segment, an "estimated time of travel" and an
        "estimated length of travel". In addition, each road
        segment may be associated with a "congestion level" and
        a "road type". Based on this data and on routing
        criteria set by the user, the "system for determining a
        route" evaluates the cost of relevant road segments and
        determines (and recommends) the route having the lowest
        total cost.

3.5   The congestion level of a road segment determines a
        factor by which the estimated time and length of travel
        of the road segment are multiplied for the purpose of
        evaluating the cost of that road segment. The
        application explains that the user may increase the
        congestion level of an area or road that he wishes to
        avoid "for purely personal reasons" (page 6, lines 20
        to 30). The application further discloses that
        congestion levels may be updated in response to
        received congestion information, either manually by the
        user listening to radio reports on traffic conditions
        or automatically by a data receiving device.

3.6   The routing criteria described in the application are a
        "time/distance factor", a "highway preference/avoidance
        factor" and a "toll roads preference/avoidance factor".
        These may be used to influence the evaluation of the
        cost of a road segment as follows:

        -       the time/distance factor is used to weight
                estimated time of travel against estimated length
                of travel;
        -       the highway preference/avoidance factor is used to
                adjust the cost of road segments with road type
                "highway";
        -       the toll roads preference/avoidance factor is used
                to adjust the cost of road segments with road type
                "toll road".

Main request

4.   *Interpretation of claim 1*

4.1   Claim 1 of the main request defines the database of
        road segments as including an estimated time of travel
        and an estimated length of travel as costs associated
        with each road segment. Claim 1 further specifies that
        the user is allowed to "adjust said cost of at least
        one selected said road segment proportionally to its
        estimated time of travel or estimated length of
        travel". The formulation of the latter feature is
        somewhat problematic: "said cost" appears to refer to
        the estimated time of travel and/or estimated length of
        travel, but it is not immediately apparent what is
        meant by "adjusting" a cost "proportionally to" itself.
        This feature therefore requires interpretation.

4.2   In its letter dated 25 June 2014, the appellant
        submitted that this feature referred to the

modification of the time/distance factor discussed in
the description on page 7, lines 1 to 19. At the oral
proceedings, the appellant submitted that the feature
was intended to cover all cost adjustments disclosed in
the application, i.e. both the adjusting of congestion
levels and the adjusting of the time/distance factor
and of the preference/avoidance factors.

4.3   Given that the feature refers to the cost "of at least
        one <u>selected</u> said road segment", the Board considers
        that it can only refer to the adjustment of congestion
        levels. Indeed, the time/distance factor and the two
        preference/avoidance factors are applied to the route
        calculation as a whole and not to one or more selected
        road segments, whereas it follows from the description
        on page 6, line 13, to page 7, line 4, in combination
        with Figure 2 that congestion levels are specific to
        individual road segments.

4.4   Another point of discussion at the oral proceedings was
        whether claim 1 had to be understood as being limited
        to a navigation system operating in a vehicle, or
        whether it also covered a personal computer executing
        route-planning software. The appellant insisted that
        the claim was not limited to navigation systems
        operating in a vehicle, but also covered navigation
        systems to be used on a bike or while walking, and
        indeed covered a personal computer executing route-
        planning software. The Board notes that this broad
        interpretation does indeed find support in the
        description (see point 3.1 above).

5.   *Inventive step – Article 56 EPC*

5.1   In the Board's view, the term "navigation system" would
        normally be understood as a system comprising route-

planning functionality as well as a position-
determining device and being configured to provide
route-guidance information in dependence on the actual
real-world position of the system as discussed in the
description on page 9, line 12, to page 10, line 4.

However, the description explicitly supports the
broader interpretation of this term advocated by the
appellant (see point 4.4 above), and claim 1 of the
main request does not exclude this interpretation. The
Board hence adopts it.

5.1.1   At the oral proceedings the Board noted that claim 1
encompassed a personal computer programmed to execute a
particular optimisation algorithm. This algorithm takes
the following input:

-        a graph of which the edges represent road
         segments;
-        cost values ("estimated length of travel",
         "estimated time of travel") associated with the
         edges of the graph;
-        multiplication factors ("congestion levels")
         associated with at least some of the edges;
-        a first graph node ("beginning point") and a
         second graph node ("destination").

The aim of the optimisation algorithm is to determine a
path (consisting of a series of graph edges) connecting
the first graph node to the second graph node and
having the lowest total cost.

The claim leaves it undefined how this total cost is
based on the "estimated length of travel" cost values
and the "estimated time of travel" cost values, but in
the light of the description it is clear that the total

cost of a path may be based for example solely on the "estimated length of travel" costs (adjusted by the "congestion level" multiplication factors), or solely on the (adjusted) "estimated time of travel" costs, or on a weighted average of both.

5.1.2   According to claim 1, the graph is provided by means of a "database of road segments". This database also stores "estimated length of travel" and "estimated time of travel" cost values for each road segment. The claim does not define the database in terms of technical features and it may therefore be assumed to be a conventional storage means.

The "beginning point" graph node, "destination" graph node and "congestion level" multiplication factors may be input by a user using a conventional "user input device" (cf. point 3.3).

The determined optimal path is "recommended", which for example could take the form of displaying the ordered list of graph edges on a conventional display device.

5.1.3   Optimisation algorithms are mathematical methods, excluded "as such" from patentability under Article 52(2) and (3) EPC. Mathematical algorithms may contribute to the technical character of an invention only in so far as they serve a technical purpose (see e.g. decision T 1784/06 of 21 September 2012, reasons 3.1.1).

In the present case the purpose of the algorithm is the mere display of an optimal path to the user for cognitive processing. The user may act on the information, but does not need to. As stated in decision T 1670/07 of 11 July 2013, reasons 13, a

technical effect may arise from either the provision of data about a technical process, regardless of the presence of the user or its subsequent use, or from the provision of data (including data that on its own is excluded, e.g. produced by means of an algorithm) that is applied directly in a technical process. In the present case the data is produced by means of an algorithm and is not applied directly in a technical process, so that neither possibility applies.

The Board hence considers that the optimisation algorithm of claim 1 does not serve a technical purpose and therefore does not make a technical contribution.

5.1.4   The appellant essentially argued that the skilled person concerned with the field and teachings of the invention was a person skilled and active in the field of developing and manufacturing navigation systems and the technical and environmental circumstances involved therewith. He was required to have knowledge about topographical information concerned with map data used with such navigation systems, environmental conditions involved with such topographical information, traffic routing and planning, and human-machine interfaces involved in operating a navigation system. The algorithm was concerned with real-world facts. The costs associated with road segments reflected technical and geographical conditions and specifics to the topographical information which were to be considered when determining the route.

However, the present invention is not concerned with the specifics of the constitution of road maps and corresponding databases. The database of road segments of claim 1 is essentially a graph comprising nodes and edges with cost values assigned to the edges.

Calculating a route having the lowest total cost does
not require knowledge of environmental conditions or
traffic routing and planning. The database of road
segments serving as input to the algorithm may reflect
real-world facts, but the mere fact that the input to
an algorithm has a particular meaning in the real-world
is insufficient for the algorithm to make a technical
contribution (see e.g. decision T 154/04, OJ EPO 2008,
46, reasons 20).

5.1.5   The appellant also argued that it made no difference
whether the route planning algorithm is implemented in
a general-purpose computer or in a navigation system
installed in a vehicle or used on a bicycle or while
walking. It was also not relevant whether the beginning
point or destination were received by GPS or entered
manually.

The Board notes that the view that the (claimed)
context in which an algorithm is used is of no
relevance for the question whether the algorithm
contributes to the technical character of the claim is
simply incorrect. Features that as such are excluded
from patentability may provide a technical contribution
to the extent that they interact with the technical
subject-matter of the claim for solving a technical
problem (see decision T 154/04, reasons 5, under (f),
and reasons 13). If an invention resides in the
application in a technical process of data produced by
an algorithm (the example given in decision T 1670/07,
reasons 13, see point 5.1.3 above), the application of
the produced data in the technical process should be
properly reflected in the claim.

5.1.6   The appellant's further argument that the invention
gives the user more options to influence the

determination of a route in accordance with his personal needs than existing algorithms has no bearing on whether the algorithm underlying the claimed subject-matter serves a technical purpose.

5.1.7   The Board concludes that the technical content of claim 1 consists in a computing system comprising conventional storage means and conventional input means. Since, as the Examining Division correctly considered, such computing systems were notorious knowledge at the filing date of the application, the subject-matter of claim 1 lacks an inventive step within the meaning of Articles 52(1) and 56 EPC.

5.2   For the sake of completeness, the Board notes that the same conclusion of lack of inventive step is reached if the term "navigation system" is given the narrower interpretation of a system comprising route-planning functionality as well as a position-determining device and being configured to provide route-guidance information in dependence on the actual real-world position of the system. The reasoning is however different.

5.2.1   In the Board's view, providing real-time route-guidance information to a user in dependence on the user's real-world position is a technical task. It involves an interaction between the user and the navigation system, wherein the navigation system continuously measures the user's position using technical means and, on the basis of these measurements, provides the user with information aimed at enabling the user to manage the technical task of moving a vehicle to a desired destination.

Although the completion of this technical task depends on the user acting upon the provided route-guidance information and hence on an intervention by the user, it does not rely on subjective considerations by the user or on psychological effects. The user may still decide to ignore the route-guidance information, but that does not detract from the technical character of the navigation system as a technical tool to be used interactively in a technical process and not merely in a preparatory phase as a substitution of what could also be done using pencil and paper.

5.2.2   It follows that a mathematical route-planning algorithm, when used in a navigation system as described in point 5.2, contributes to the technical character of the system at least to the extent that it produces information that enables the route-guidance functionality. A route-planning algorithm does this by producing a route in the form of an ordered list of road segments based on real-world map data.

5.2.3   In this context, features resulting in a different choice of route may contribute to the technical character of the invention, but only in so far as they are based on technical considerations which influence the provided route-guidance information. In other words, while moving a vehicle along a different route always has physical consequences, for the purpose of determining the technical contribution of the route-planning algorithm such consequences are only to be taken into account as technical effects to the extent that they result from the choice of a route based on technical considerations. In the case of claim 1, basing the route calculation on estimated time of travel and/or estimated length of travel, both of which arguably reflect technical characteristics of a real-

world road network, would seem to be an example of such
a technical aspect.

5.2.4   The background section of the present application
         describes features of a conventional navigation system
         installed in a vehicle (page 1, lines 11 and 12). It
         comprises a database of road segments to be travelled
         by a user (page 1, lines 8 to 11), a system for
         selecting a beginning point relative to the database of
         road segments (page 1, lines 8 to 15), an implicit user
         input device for selecting a desired destination
         relative to said database of road segments (page 1,
         lines 8 to 11) and a position-determining device
         (page 1, lines 12 to 15). The navigation system
         displays the current position of the vehicle and turn-
         by-turn instructions to the driver (page 1, line 30, to
         page 2, line 2).

5.2.5   This acknowledged prior art further comprises a system
         for determining a route from the starting point to the
         destination. This is performed using an algorithm that
         is said to be well-known to those in the art and in use
         in many navigation systems at the priority date of the
         application (page 1, lines 16 to 18). This algorithm
         works by selecting, among the many potential routes
         between the selected starting point and the desired
         destination, the route that has the shortest total
         length, the lowest total time, or some weighted average
         of length and time. The total length and total time of
         a route is determined based on "cost" values associated
         with each road segment in the database, these cost
         values including the length of the road segment and the
         estimated time of travel through the road segment
         (page 1, lines 18 to 27).

5.2.6   For the sake of completeness, the Board notes that
        document D1 discloses such a known navigation system
        intended for installation in a vehicle (column 3, lines
        20 to 22). The navigation system of document D1
        comprises a database of road segments to be travelled
        by a user (column 3, lines 25 to 28) and a user input
        device for selecting a desired destination (column 3,
        lines 22 to 25 and lines 53 to 56). Document D1, column
        6, lines 6 to 13, confirms that it is conventional to
        recommend the route with the shortest total length
        ("shortest mileage route") or with the lowest total
        time ("shortest time route").

5.2.7   The navigation system of claim 1 differs from the
        acknowledged prior art in that (in accordance with
        points 4.3 and 3.5 above) it further comprises a system
        configured to allow the user to adjust the "congestion
        level" of at least one selected road segment utilising
        the user-input device, thereby determining a factor by
        which the estimated time and length of travel of the
        road segment are multiplied for the purpose of
        evaluating the cost of that at least one selected road
        segment.

5.2.8   By increasing or decreasing the congestion level
        associated with a particular road segment, the user may
        make it less or more likely for the road segment to be
        included in the route calculated by the route-planning
        algorithm. In this way, the user may express his
        subjective preference for the road segment. The
        description of the application on page 6, lines 23 to
        25, confirms that the motivation for adjusting the
        congestion level of a route may reside in "purely
        personal reasons". At the oral proceedings, the
        appellant also stressed that the invention gave the

user more options to influence the route calculation in accordance with the user's personal needs.

5.2.9   The Board considers that the idea of allowing the user to set congestion levels for selected road segments which serve as multiplication factors in the route-calculation algorithm is not technical and can therefore not contribute to an inventive step. This is because accommodating the user's personal preferences is as such not technical and the Board does not see any other (technical) purpose that the congestion levels serve in the context of claim 1. Although the user of the claimed navigation system could certainly use this option for a technical purpose (for example in order to avoid a particular road for which he knows that his car is technically less suitable), the claim is not limited to such uses.

5.2.10 The implementation of this non-technical idea essentially consists in enabling the user to utilise the conventional user input device to select at least one road segment and to adjust the congestion level for the selected at least one road segment. The Board considers this implementation to be obvious, and the appellant has not argued otherwise.

5.2.11 The appellant argued that recognising the possibility of allowing the user to influence road calculation by letting him adjust costs of selected road segments was not obvious, as there were many other ways in which route calculation could be influenced and the solution claimed was not suggested by the prior art. In addition, it was not relevant that the distinguishing features served the purpose of accommodating the user's personal needs. At the oral proceedings, the appellant

drew an analogy with manufacturing a more beautiful product, which could also represent an inventive step.

However, the Board's reasoning does not rely on a particular suggestion in the prior art, but on the finding that the proposed algorithmic change has no technical motivation and that its implementation is, uncontestedly, trivial. In so far as it is the appellant's view that technicality is irrelevant for the assessment of inventive step, this view is contrary to the established case law.

5.2.12 It follows that the subject-matter of claim 1 lacks an inventive step within the meaning of Articles 52(1) and 56 EPC even if the term "navigation system" is given a narrow interpretation.

5.2.13 The Board notes that the German Federal Supreme Court has come to a similar conclusion in respect of a navigation system offering the user the possibility to exclude road segments based on a user-selectable property such as the road segment being a toll road (see BGH, 18 December 2012, X ZR 3/12, GRUR 2013, 275 - Routenplanung).

5.3   For the above reasons, the main request is refused.

Auxiliary request 1

6.   *Added subject-matter and clarity*

6.1   Independent claim 1 of auxiliary request 1 differs from claim 1 of the main request essentially in that the claimed navigation system further comprises a data receiving device configured to receive congestion information regarding congested road segments and

automatically update congestion levels associated with
appropriate road segments.

This feature finds a basis in the description as filed
and published on page 3, lines 17 to 20, page 5, lines
9 to 12, and page 7, line 30, to page 8, line 3.

6.2   The remaining amendments to claim 1 were made with a
        view to improving its clarity. In particular, the issue
        discussed in points 4.1 to 4.3 has been resolved.

6.3   The Board notes that claim 1 in one place refers to
        "congestion level" as a "cost", which strictly speaking
        it is not. However, the meaning of the term "congestion
        level" is rendered sufficiently clear by the feature "a
        system (...) which multiplies the cost of each road
        segment by the congestion level for that road segment".

6.4   Similarly, the Board considers the feature "a system
        which is configured to allow the user to adjust said
        congestion level of at least one selected said road
        segment utilizing said user-input device" to
        sufficiently clearly express that this system also
        enables the selection by the user of said road segment.

6.5   Consequently, the requirements of Articles 84 and
        123(2) EPC are fulfilled in respect of independent
        claim 1 and of corresponding independent method
        claim 10.

7.   *Remittal to the department of first instance*

7.1   The Board considers that the inclusion in claim 1 of a
        data receiving device configured to receive congestion
        information excludes the broad interpretation of the
        term "navigation system" covering a personal computer

executing route-planning software and that the claim is
now restricted to a navigation system operating in a
vehicle as discussed in point 5.2 above.

7.2   The background section of the present application is
       silent on the receipt of congestion information, so
       that the feature added to claim 1 further distinguishes
       the claimed subject-matter from the acknowledged prior
       art.

7.3   The passage of the detailed description on page 5,
       lines 4 to 15, which discusses the added feature,
       mentions that "[c]ongestion-monitoring devices are
       known and currently used to automatically monitor the
       congestion levels of certain road segments, typically
       near intersections" and that "[p]referably, information
       regarding congestion from the congestion-monitoring
       devices is broadcast to the surrounding area and
       received by the data receiver 42".

       The Board does not consider this passage to be an
       admission that at the filing date of the present
       application it was known for navigation systems to
       automatically receive congestion information from
       congestion-monitoring devices. Suitable congestion-
       monitoring devices were apparently known, but they may
       have been used for entirely different purposes.

       Document D1 also does not disclose a navigation system
       configured to automatically receive congestion
       information.

7.4   The Board is of the view that the received congestion
       information provides an indication of real-time real-
       world road conditions and that basing the calculation
       of a route on such conditions in the context of actual

navigation is technical. There is therefore the
potential of an inventive step. Auxiliary request 1
hence overcomes the reasons for the refusal.

7.5   However, before an inventive step can be acknowledged,
        a further investigation has to be made of the prior
        art, in particular of the documents cited in the
        international search report and the supplementary
        European search report. In addition, if the independent
        claims are found to involve an inventive step, the
        dependent claims have to be examined at least under
        Articles 84 and 123(2) EPC, and the description will
        have to be adapted. The Board therefore remits the case
        to the department of first instance for further
        prosecution.

7.6   The present application was filed under the PCT on
        17 September 1997 and entered into the regional phase
        before the EPO on 15 March 2000. After a single
        communication under Article 96(2) EPC it was refused
        during oral proceedings, the written decision being
        posted on 17 March 2011. In view of this considerable
        delay and, in case of an eventual grant, the remaining
        term of the patent, the Board expects the department of
        first instance to deal with the case expeditiously.

Order

For these reasons it is decided that:

1.   The decision under appeal is set aside.

2.   The case is remitted to the department of first
        instance for further prosecution.

The Registrar: The Chairman:

I. Aperribay   R. Moufang

Decision electronically authenticated